



RF Transmitter ASK/FSK/GFSK/GMSK/MSK/OOK 3V 20-Pin QFN EP T/R

Manufacturer: <u>STMicroelectronics, Inc.</u>

Package/Case: QFN-20

Product Type: Communication & Networking ICs

RoHS: RoHS Compliant/Lead free

Lifecycle: Active



Images are for reference only

Inquiry

General Description

The STS1TX is a very low-power RF transmitter intended for RF wireless applications in the sub-1 GHz band. It is designed to operate both in the license-free ISM and SRD frequency bands at 169, 315, 433, 868, and 915 MHz, but can also be programmed to operate at other frequencies in the 300-348, 387-470, and 779-956 MHz bands. The air data rate is programmable from 1 to 500 kbps, and the STS1TX can be used in systems with channel spacing of 12.5/25 kHz, complying with the EN 300 220 standard. It uses very few discrete external components and integrates a configurable baseband modem, which supports data management and modulation. The data management handles the data in the proprietary fully-programmable packet format, and also allows the M-Bus standard compliance format (all performance classes).

An AES 128-bit encryption co-processor is available for secure data transfer. The STS1TX supports different modulation schemes: 2-FSK, GFSK, OOK, ASK, and MSK. Transmitted data bytes are buffered in FIFO (TX FIFO), accessible via the SPI interface for host processing.

Key Features

Frequency bands: 150-174 MHz, 300-348 MHz, 387-470 MHz, 779-956 MHz

Modulation schemes: 2-FSK, GFSK, MSK, GMSK, OOK, and ASK

Air data rate from 1 to 500 kbps

Very low power consumption (21 mA TX at +11 dBm)

Programmable channel spacing (12.5 kHz min.)

Programmable output power up to +16 dBm

Fast startup and frequency synthesizer settling time (6 $\mu s)$

Integrated temperature sensor

Battery indicator and low battery detector

TX FIFO buffer (96 bytes each)

Configurability via SPI interface

Recommended For You

STA5620 ST25RU3993-BQFT ST25R95-VMD5T

STMicroelectronics, Inc STMicroelectronics, Inc STMicroelectronics, Inc

QFN QFN48 QFN32

STA8090FG STA8088GA ST95HF-VMD5T

STMicroelectronics, Inc STMicroelectronics, Inc STMicroelectronics, Inc

BGA QFN QFN32

ST25DV16K-JFR6D3 ST25R3920-AQWT ST25DV04K-IFR6C3

STMicroelectronics, Inc STMicroelectronics, Inc STMicroelectronics, Inc

12UFDFPN VFQFPN32 DNF8

STMicroelectronics, Inc STMicroelectronics, Inc STMicroelectronics, Inc

QFN VFQFPN56 SOP8

SMA661ASTR ST25R3916-AQWT STM32WB55CGU7

STMicroelectronics, Inc STMicroelectronics, Inc STMicroelectronics, Inc

SOT666 QFN32 UFQFN48